Amendments to the Specification

Please replace the paragraph at page 1, lines 10 through 13 with the following amended paragraph:

The present invention relates to Wide Area Network (WAN) communications, and in particular to placing devices at both ends of a communication link to intercept packets and ~~reduces~~ reducing latency by making parallel transport layer connections.

Please replace the paragraph at page 1, lines 14 through 25 with the following amended paragraph:

The growth in data communication traffic, including email, client/server applications, multimedia applications, Internet and intranet applications, has continued to cause critical bandwidth shortages across many networks. This demand for instant data communication often exceeds the available capacity, congestion and delay result. As more software applications move from Local Area Networks (LANs) to Wide Area Networks (WANs), user response time increases, and thus can become a critical limiting factor in smooth operation of an enterprise. With offices widely distributed around the globe and present day budgetary constraints on new telecommunications deployments, the implementation of additional wide area links is cost prohibitive for many international installations. Consequently, network system architects need additional solutions to help them efficiently use existing bandwidth to support more applications and more end users.

Please replace the paragraph at page 2, lines 16 through 24 with the following amended paragraph:

More particularly, ~~typically~~ an application typically requests data to be sent to another application at a remote machine. The TCP protocol stack, as typically located in the kernel of an operating system of the sending machine, handles requests from various applications and passes data to the network. This TCP stack partitions the data into segments to be sent over appropriate

transmission media, *i.e.*, physical layer connections, and waits for an acknowledgement from the receiving application to know that a particular segment has been received correctly. TCP achieves this by defining how long it will wait, i.e., a window size on both the sender and receiver.

Please replace the paragraph at page 9, lines 24 through 29 with the following amended paragraph:

In order for each remote network accelerator to be informed of the characteristics of the connection it is dealing, a proxy-to-proxy protocol is employed. Information transmitted via this proxy-to-proxy protocol includes at least the original transport protocol i.e., information as to whether or not the original protocol is TCP or UDP, original addresses and ~~parts~~ ports, start and end points for data and any possible error conditions.

Please replace the paragraph at page 10, lines 11 through 23 with the following amended paragraph:

In the preferred embodiment, the compression scheme used is a variation of LZ77 and Huffman coding compression algorithms. The original LZ77 algorithm is described in a paper by Ziv J., et al., " A Universal Algorithm for Sequential Data Compression," IEEE Transactions on Information Theory, Vol. IT-23 (1979) pp. 337-343, although variants thereof can be used. The Huffman coding compression algorithm is described in "A Method for the Construction of Minimal Redundancy Codes," Proceedings of the IRE, Vol. 40, (1952), pp. 1098-1101, although again, variants can be used. In a preferred embodiment, compression occurs as follows. Data is first compressed using an LZ77 algorithm. This algorithm uses a persistent compression dictionary associated with a persistent connection assigned to transfer the data. In the next step, a Huffman coding algorithm is then applied to the results the first step. If the results of the previous steps exceed the size of the original data, then the original data is sent as is.